

ABSTRACT OF THE DISCLOSURE

HIGH PERFORMANCE VALVE ASSEMBLY FOR TOILETS

5 A flush valve assembly includes a valve body with a first cylindrical tube member and a flush cover member that is coaxially and slidably mounted with respect to the valve body so as to create a valve opening therebetween when the flush cover member is removed from the valve body. A guiding means is provided that includes a second cylindrical tube member secured to the flush cover member and slidably fitted over the first cylindrical tube member. The guiding
10 means further includes at least one alignment tab on the flush cover member that engages a corresponding tab recess defined in the valve body. A secondary float assembly pivotably affixed to the valve body has a flotation cup with a resilient member integral therewith. A pawl member includes retention members in combination with each of a primary finger and a secondary finger that engage an integral tab portion along an outside peripheral surface of the
15 flush cover member during reciprocating movement of the flush cover member. A trip release mechanism that is coaxially mounted with respect to the valve body and flush cover member releases the effect of a flush lever on the flush cover member when the flush cover member reaches a position that permits fluid flow through the valve opening. A baffle cup is provided that has an outer periphery defining a float cavity therewithin and at least one aperture provided
20 therethrough to establish communication among the flush lever, baffle cup and trip release means.